

December 2017

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The Scientist Storyteller

By Allison Dennis

Stories empowered communication even before recorded history began. Research has shown us that being immersed in literature can help us understand other people better.¹ The way we tell a story shapes our memory and our ability to recall detail.² Yet as part of my scientific training, I often am imparted with the recommendations to "let the data speak for itself," "don't overhype," or "speculation is cheap." I understand the need to stick to the facts when speaking with other scientists, but is our reluctance to be storytellers compromising our relationship with the outside world?

As a graduate student in the NIH-graduate partnership program, I recently had the opportunity to attend a career workshop at my partner university, Johns Hopkins. Liz Neeley, executive director of **The Story Collider Podcast**, hosted the workshop. She has focused her career on helping scientists tell more compelling stories about their work. Liz doesn't shy away from unwieldy subjects and encourages scientists to approach the Story Collider stage with the diversity of experiences needed to capture the collective experiences of the scientific community. If you have never caught an episode of Story Collider, it is an intimate archive of scientists simultaneously appraising what they see in the world around them while capturing facets unique to being a scientist. The presented narratives are deeply personal, yet entertaining, allowing their messages to resonate well beyond the spoken word.

Listening to clips from the podcast in a room of other graduate students, and listening to Liz talk about the elements of successful storytelling, I was struck by the effect that personal stories can have on an audience. I didn't necessarily understand the details of the storytellers' research, but I understood their experiences. Hearing them describe their struggle and the lengths they would go through to overcome challenges helped me appreciate the importance they find in their work.

I've sat at dinner with my family or friends and spun an entertaining recap of my day, but I've never appreciated the deliberate preparation that I could use to tell the best stories about being a scientist. I usually shy away from revealing how my days are mostly filled with mixing miniscule amounts of clear liquids because I don't see how most people would find it interesting. I don't think I'm wrong about that, but my approach is wrong. Being a successful storyteller

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Letter from the Editor

December brings Part II of our "Thinking Outside the Box" series. While preparing for this issue, I had an interesting email communication with Allison Dennis, a graduate student in the Clark Lab. In her email, she asked a question that was well outside the box: "What if scientists were more conscious storytellers when interacting with members of the community? If we focused on telling stories on our experiences instead of our science, would it help bridge the gap?"

Allison was pondering this question after a recent career workshop about **The Story Collider Podcast**. Of course I listened to the podcast after Allison's glowing report. The series is great! I found the scientists' stories to be an interesting mash up of science and comedy with surprising underlying dramas. In our **feature article** this month—inspired by the workshop and the podcast—Allison shares her thoughts on using storytelling as a means to connect scientists with the public.

Continuing our theme, Dr. Amber Stratman, NICHD fellow mentor of the year, writes about her mentoring philosophy and what thinking outside the box means to her. Following Dr. Tamás Balla's article last month, Amber's thoughts highlight the fellow perspective in particular, as she reminisces about first starting out in a lab.

The last month of the year imparts a tendency toward reminiscing, doesn't it? If you're in the mood for a look back at NICHD fellow accomplishments, check out our 2017 Year in Review on **page 8**!

Looking forward, we're excited to welcome <u>new NICHD fellows</u>, report several opportunities with the NIH Fellows Committee, and announce a new series of social networking events next year, planned by the Fellows Advisory Committee (see <u>December announcements</u>).

Enjoy the issue and see you in the New Year!

Your Editor in Chief, Shana R. Spindler, PhD

Please send questions and comments to our editor at **Shana.Spindler@gmail.com**.



The Scientist Storyteller

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means drawing the audience in, finding common ground on the richness of description. Clear liquids might not enrich the fabric of a story, but my mom can understand the disappointment I feel when the blue dot of my RNA pellet fails to emerge from the uninformative milieu at the bottom of my tube.

What if as scientists we made an effort to be more conscious story tellers when interacting with members of the community? What if we focused on telling stories that capture our experiences instead of worrying whether our family can accurately explain what we do in our work? One of my closest friends is an Occupational Therapist. My understanding is that she spends her days helping patients regain their sensory connections to the world after an injury like a stroke. However, I have rarely heard her talk about her experiences. I imagine her struggle is the same as mine, "no one wants to listen to me talk about sickness and the messiness of recovery over dinner." Yet the rare stories she does share have stuck with me. I can feel her frustration at helping a particularly cranky patient regain the ability to shuffle cards during a session, only to have him forget how during the next session. I know the embarrassment and comedy of the time she was left stranded in the hallway with a patient she couldn't physically move for an hour. These are personal stories she wouldn't share in a professional setting, but to me they are valuable connections to a world I wouldn't have a connection to otherwise.

In February 2017, scientists flooded Twitter with the declaration #ActualLivingScientist in an attempt to address the fact that most American's can't name a living scientist.3 However, the virality of the message was realized when scientists began using the hashtag to share an image of them at work, flooding the Twitterverse with friendly introductions from worm-holding, boat-riding, hard-hat-wearing scientists.4 The eagerness of the community to share the diversity of their experiences seemed to come from an attempt to address a persistent stereotype. The one that is undeniably captured by the overwhelming tendency for students is to draw a white man in a lab coat with crazy hair (when asked what a scientist looks like). The hashtag is still seeing light traffic and is believed to have been followed by many nonscientists. The viral excitement captured by the movement will remain entombed in social media, but the oldest and most universal form of communication may provide a daily opportunity to address these issues. I've made the observation. I'll leave the experimentation up to you.



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Dr. Amber Stratman, Fellow Mentor of the Year, on Thinking Outside the Box

When I first started doing research in a lab as an undergraduate, I had zero 'bench work' skills. The lab PI took a risk on hiring me. She had tremendous patience, and I feel that both she and I grew from working together my first summer in her lab. I feel like my philosophy on mentoring/teaching is very straightforward: 1) I will not ask students to carry out tasks that I would not do myself, and 2) I try to maintain humility and perspective,



remembering someone took the time to train me. I think the great thing about science is that it is the ultimate unifier, with everyone working towards a common goal.

So, what does thinking outside the box mean to me? For me, it means adding your unique voice and perspective to the scientific community. Every person is an individual. Every person processes ideas and concepts differently. Every person plans, executes, and directs their experiments uniquely. We will all have a wrong hypothesis sometimes, and we will all plan a bad experiment. But we will all also have successes. If everyone approached science in the same way, there would be no forward progress. So, to me, thinking outside the box means thinking like your unique self, and not being afraid to express your personal scientific thoughts.

The Rep Report

By Suna Gulay, PhD

As the current NICHD Basic Sciences Representative, I represent NICHD postdoctoral fellows at the FelCom meeting every month and share the latest news with you here. Do you have a concern or question that you want brought up at the next meeting? Contact me at suna.gulay@nih.gov!

The FelCom Career Development subcommittee is looking for new members in December. This subcommittee organizes a yearlong panel series, focusing on different career paths every month. In these panels, NIH fellows get a chance to hear from the invited junior and senior professionals on their job search experiences as well as day-to-day work routines, and they have the opportunity to meet them in person after the event. The career paths selected each year cover a wide range: Industry, Consulting, Teaching, Data Science, Science Writing, and many more.

As a member, you are expected to attend monthly meetings and volunteer to take part in one or more panels. If you volunteer to be the organizer of a panel, you get the opportunity to choose and meet with all panelists. You may also choose to work behind the scenes of a panel, such as communicating with OITE to promote the event, or writing a summary for fellows who could not attend. Please email co-chairs Qiong Fu (qiong.fu@nih.gov) and Shyamala Jadhav (shyamalagauri. jadhav@nih.gov) if you're interested in joining. Meetings take place every first Thursday of the month at 3 PM, Bldg 2, Room 2W-15.

Follow the upcoming Career Development panels here: https://www.training.nih.gov/events/upcoming.

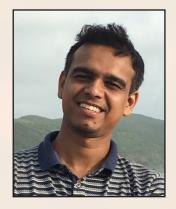
Write-ups of past events are found at: https://www.training.nih.gov/
FelCom/CareerDevelopment.

Happy Holidays!



Meet Our New Fellows

We are happy to welcome our new fellows to the NICHD family. If you arrived recently at the NICHD and would like us to introduce you in our quarterly "Meet Our New Fellows" column, please contact our editor, Dr. Shana Spindler, at Shana.Spindler@gmail.com.



SAUMITRA DEY CHOUDHURY (SAM)

Postdoctoral Fellow

Home city: Karimganj, Assam, India

Graduate school: Indian Institute of Science Education

and Research (IISER) Bhopal NICHD mentor: Dr. Mihaela Serpe

Area of research: I am interested in understanding the developmental events leading to synapse assembly and stability using the *Drosophila* neuromuscular

junction as the model system.



AREG PELTEKIAN

Postbac Fellow

Home city: Los Angeles, California, USA

Bachelor's degree institution: University of California,

San Diego

NICHD mentor: Dr. Peng Loh

Area of research: I study the role of protein

Carboxypeptidase E as a trophic factor that mediates neuroprotection, neurodevelopment, and metastasis in cancer using various mouse models and cell lines.





NICHD DIR Year in Review for 2017

A look back at the numerous accomplishments belonging to fellows in the NICHD Division of Intramural Research (DIR) during 2017:

The NICHD DIR, with the help of the **Retreat Steering Committee**, held the Thirteenth Annual Meeting of Postdoctoral, Clinical, and Visiting Fellows and Graduate Students at the National Museum of the American Indian on May 1, 2017. Keynote speakers included Nobel Laureate Dr. Peter Agre and comedian Dr. Adam Ruben.

Dr. Jiangnan Luo (Lee Lab) won the 2017 fellows retreat image competition with his image of a pupal *Drosophila* brain optic lobe, highlighting axons of photoreceptors, lamina neurons, the medulla, and the lobula complex.

Dr. Rosario Vicidomini (Serpe Lab) won the 2017 NICHD DIR Scientific Retreat Image competition with his image of neuromuscular junction (NMJ) motor neurons in *Drosophila* larvae. Looks like flies won the show this year!

Dr. Amber Stratman received the NICHD Fellow Mentor of the Year award. She was nominated by her mentor, Dr. Brant Weinstein, and three postbac fellows, Sofia Pezoa, Margaret Burns, and Olivia Farrelly.

Dr. Tamás Balla received the NICHD Investigator Mentor of the Year award. He was nominated by graduate student Elisa Arthofer.

Twenty-nine NICHD fellows received the 2018 Fellows Award for Research Excellence (FARE Awards) at the 2017 Annual NIH Research Festival (complete list here).

During the 2017 Postbac Poster Day, a total of 12 NICHD postbacs received an overall top 20 percent poster award (NIH-wide, complete list **here**).

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NICHD DIR Year in Review for 2017

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Margaret Burns (Weinstein Lab), Katherine Gillis (Machner Lab), Kelly Tomins (Weinstein Lab), and Elizabeth Turcotte (Dasso Lab) received the 2017 NICHD "Best" postbac poster awards for the 2017 Postbac Poster Day.

Dr. Arup Chakraborty, postdoctoral fellow in the DePamphilis lab, placed third in the 2017 Three-minute-Talk (TmT) Competition, which included fellows from the NICHD, NHGRI, and NIDCR.

NICHD postbacs were accepted to 17 prestigious professional schools for MD, PhD, or MD/PhD programs!

A big THANK YOU to all of our 2017 newsletter contributors:

Gulcan Akgul, Mariam Awad, Tamás Balla, Sadie Bergeron, Megan Sampley Bohn, Fatima Chowdhry, Stephanie Cologna, Allison Dennis, Copelan Gammon, Suna Gulay, Rebecca Hammond, Yolanda Hawkins, Alison Heffer, Anthony Hickey, Nicolas Johnson, Joo Yun Jun, Audrey Lee, Neal MacDonald, Rim Mahari, Pushpanathan Muthuirulan, Uma Neelathi, Yvette Pittman, Leana Ramos, John Reich, Nabil Saleem, Prasanna Satpute-Krishnan, Susmeeta Twari Sharma, Amber Stratman, Jeremy Swan, Kathryn Tabor, Valerie Virta, Zelia Worman, Quira Zeidan

Please submit your accomplishments for publication in the newsletter throughout the year to **Shana.Spindler@gmail.com**.

ATTENTION ALL: FELLOWS SOCIAL NETWORKING EVENTS START IN JANUARY!

Starting January 25, 2018, the NICHD Fellows Advisory Committee will host a "Fellows

Social Networking (FSN)" event four times a year at Tapp'd, a local restaurant in Bethesda

(close to campus, click link for their menu and specific location).

This will be a great opportunity for the NICHD fellows community to socialize and network with each other (with good food!) in an enjoyable environment. All current trainees within the institute are welcome, and we plan to invite a NICHD fellow alumnus, representing a different career path, for each of the dates listed below.

For our inaugural event next month, we hope you can join us!

Please send Dr. Yvette Pittman (<u>yvette.pittman@nih.gov</u>) a quick note if you plan to attend the FSN event on January 25.

Mark your calendars for January 25, May 24, July 26, & October 25, from 5:30 to 7:30 PM.

See you all there, The NICHD Fellows Advisory Committee

CHECK OUT THE NEW AND IMPROVED BIO CAREERS WEBSITE

<u>Bio Careers®</u> has relaunched its website. This excellent career site for science postgraduates and MDs just got better!



The Career Hub for Postgraduate Life Scientists

- » Now mobile friendly
- » Much faster website
- » Content streamlined so you can reach your desired jobs, webinars, and blogs on any platform.

Find the jobs, tools, and information an advanced scientist needs for any **Job Search**.

Their blogs and articles cover over **100 career paths** in 20 career path categories.

They'd love feedback on the new release, so let them know how you feel about the new site and how it meets your needs.

Post a comment on <u>Facebook</u> or <u>Twitter</u>! Email Nick, founder of Bio Careers®, at <u>nick@biocareers.com</u>

As a fellow in our institute, you can register for a free account by selecting "NICHD" from the member's list.

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THE BUSINESS OF SCIENCE: YOUR GUIDE TO CAREER SUCCESS

A new training for fellows and graduate students interested in pursuing a career in industry

January and February of 2018—register now!

We will offer this certificate program by <u>SciPhD</u> as a four-day course in January and February 2018 at the NIH. Enrollment is now open for 40 NICHD trainees.

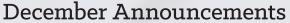
The course is designed to translate academic research skills into the business-oriented qualifications that hiring companies are looking for. At present, the course is also offered at highly respected research institutes, such as New York University, University of California San Francisco, University of California Irvine, and the New York Academy of Sciences. Ninety percent of the people who applied for jobs while taking the course reported that *The Business of Science* helped them land an interview or job offer!

Throughout the program, you will have the exciting opportunity to:

- » Learn business processes and communication skills driving science in industry
- » Learn how industry science follows the principles of the scientific method
- » Discover the many business career paths in which having a PhD can make you a competitive job candidate
- » Research a job ad and identify the scientific, business, and social skills that the company is looking for
- » Develop a targeted resume that demonstrates your specific qualifications
- » Expand your science industry network
- » Take part in mock interviews that will prepare you for your own job searches

Course instructors will hone into common research practices that academic scientists are already familiar with, to help in the understanding of business concepts, and to demonstrate how your own experiences can mold you into a competitive job candidate.

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The Business of Science will introduce students to essential science business skills in the form of 24 core business and social competencies that are categorized into six groups as follows:

Creating the Vision

- » Strategic
- » Technical Scientific
- » Innovative
- » Risk Management
- » Champion/Energy

Developing People

- » Collaboration
- » Enabling
- » Empathy
- » Rapport

Execution

- » Structuring
- » Control
- » Tactical
- » Delegation

Achieving Results

- » Production
- » Focus
- » Competition

Communications/Learning

- » Technical Literacy
- » Style Flexibility
- » Emotional Intelligence
- » Social Intelligence

Financial Acumen

- » Return on Investment
- » Internal Rate of Return
- » Determining Performance Metrics
- » Managing the Balance Sheet

The certificate program schedule: **four, full-day sessions (9 AM - 5 PM)** as follows:

Session 1	Business of Science, and Communications	Friday, January 12
Session 2	Developing People, Negotiating with your Advisor, and Building Effective Teams	Friday, January 19
Session 3	Applied Communication & Networking, and Financial Literacy	Thursday, February 15
Session 4	Negotiating Total Compensation & Leadership Styles, and Project Management, Wrap-up & Graduation	Thursday, February 22

If you would like to register, please contact Dr. Yvette Pittman at wvette.pittman@nih.gov. There are only 5 slots left!

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NICHD FELLOWS ADVISORY COMMITTEE: SEEKING NEW MEMBERS!

The Office of Education formed an advisory committee in 2016. We are seeking several more dedicated members to help us develop and initiate academic support programs for the institute. Both domestic and visiting fellows are needed. We want to achieve a broad representation, culturally and academically, so we can address the needs of all our trainees at NICHD. The committee meets monthly to exchange ideas and informally discuss ways we can enhance and tailor the training experience within the NICHD intramural program.

Some potential topics for our committee are how to:

- » Increase participation in training activities
- » Expose fellows to various careers in science
- » Identify teaching opportunities
- » Identify internal and external research funding mechanisms
- » Establish a structure for sharing scientific and career resources within the institute

The committee meets once a month on Thursdays, from 3:00 to 4:00 p.m. Our last meeting for 2017 is **December 7**, and our 2018 meetings will begin on **January 11**, **2017**.

Don't miss this opportunity to serve your intramural NICHD community. Please contact Dr. Yvette Pittman at **yvette.pittman@nih.gov** if you are interested in joining the group.

AAAS MASS MEDIA SCIENCE & ENGINEERING SUMMER FELLOWSHIP

Applications open October 16-January 15!

From the AAAS Mass Media Fellowship website:

This highly competitive program strengthens the connections between scientists and journalists by placing advanced undergraduate, graduate, and post-graduate level scientists, engineers and mathematicians at media organizations nationwide. Fellows have worked as reporters, editors, researchers, and production assistants at such media outlets as the Los Angeles Times, National Public Radio, The Washington Post, WIRED, and Scientific American.

For 10 weeks during the summer, the Mass Media Fellows use their academic training in the sciences as they research, write and report today's headlines, sharpening their abilities to communicate complex scientific issues to non-specialists. Participants come in knowing the importance of translating their work for the public, but they leave with the tools and the know-how to accomplish this important goal.

For additional information about the program visit aaas.org/mmfellowship

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WHO NEEDS JOURNAL COVERS WHEN YOU HAVE THE DIR ANNUAL REPORT?

The NICHD Division of Intramural Research (DIR) will feature exciting scientific images, from basic and clinical research laboratories, on the cover and web site of the 2017 DIR Annual Report. To submit images for consideration, please email your file to Nicki Swan (jonasnic@mail.nih.gov), or contact her if the file is too large to send by email. All entries are due by Monday, December 18, 2017.

CALLING ALL FELLOWS OF NICHD—IT'S IMAGE COMPETITION TIME!

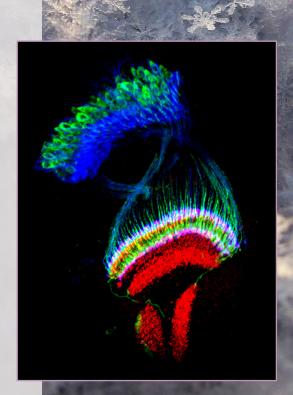
We are beginning our search for the feature image of the 14th Annual NICHD Fellows Meeting.

The winning image, chosen by the Retreat Steering Committee, will be showcased on the retreat website, on posters, and used as the front cover of the event program. Also, to highlight everyone's imagery, all submissions we receive will be used to produce a collage posted on the 2017 retreat website. You can always take a look at the image submissions from previous years at http://retreat.nichd.nih.gov.

In addition to image resolution and quality, selection criteria include the relevance to our institute's mission and artistic view of the image. All submissions (at the highest possible resolution) should be sent to Nicki Swan (jonasnic@mail.nih.gov) by Friday, January 26, with a brief caption for the image.

At right, this year's winning image by Dr. Jiangnan Luo, Lee lab.

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SAVE THE DATE: FEBRUARY 22, NIH GRADUATE STUDENT RESEARCH SYMPOSIUM

The <u>14th Annual NIH Graduate Student Research Symposium</u> will be held on Thursday, February 22, 2018, 9 AM – 4 PM at Natcher Conference Center. The daylong event includes:

- » Keynote address from Dr. Eric Betzig, Nobel laureate and group leader at Janelia Research Campus, Howard Hughes Medical Institute
- » Elevator pitch competition
- » Student talks
- » Poster presentations of dissertation research
- » Presentation of the annual Outstanding Mentor Awards
- » The annual GPP graduation ceremony
- » NIH Graduate Student Research Awards (NGSRAs)

All graduate students performing their doctoral dissertation research at NIH are eligible and encouraged to participate (500-word abstracts). All poster presenters are eligible to compete for the NIH Graduate Student Research Awards (NGSRAs, travel awards). To submit an abstract, please visit: https://www.training.nih.gov/gsc/symposium/14th/abstract.

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INTERESTED IN A CAREER IN REGULATORY AFFAIRS AT THE FDA?

The Office of Education will sponsor up to three NICHD fellows and graduate students to enroll in the FAES "Regulatory Affairs and FDA Regulation" course for the Spring semester.

If you are interested, please contact Dr. Yvette Pittman (<u>yvette.pittman@nih.gov</u>) by Friday, December 29th.

It is important that you discuss this with your mentor and he/she is supportive of your participation. See below, more course information from the FAES website.

Regulatory Affairs and FDA Regulation

Course Dates: January 31 – May 9, 2018 Wednesdays, from 4 to 6 PM

The FDA regulates, to differing extents, drugs, biologics, medical devices, foods, cosmetics, and tobacco. The Federal Food, Drug & Cosmetic Act (FD&C Act) gives FDA authority to regulate these products. Students will gain familiarity with FDA's regulatory authority under the FD&C Act. The course will begin with an overview of the United States Government and Administrative Law. Then, it will provide an overview of drug, biologic, and medical device approval processes. It will also cover how FDA regulates food, dietary supplements, cosmetics, and tobacco. Students will learn how FDA enforces its regulations. Individual and/or group projects may be assigned.

Learning Objectives:

- » Become familiar with the U.S. legal system and FDA's administrative regulatory authority
- » Learn about FDA's regulatory oversight over drugs, biologics, medical devices, foods, cosmetics, and tobacco
- » Gain an understanding of current FDA news
- » Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions

December Events

THURSDAY, DECEMBER 7, 3 – 4 PM
NICHD Fellows Advisory Committee Meeting

The committee meets monthly to exchange ideas and informally discuss ways we can enhance and tailor the training experience within the NICHD intramural program. The committee meets once a month on Thursdays, from 3:00 to 4:00 PM. Please contact Dr. Yvette Pittman at yvette.pittman@nih.gov if you are interested in joining the group.

MONDAY, DECEMBER 11, 10 AM – 12 PM Chalk Talks with Scott Morgan

Chalk Talks are an increasingly important component of science communication. Once reserved for academic interviews, they are now common in industry and for tenure-track positions, such as the NIH Earl Stadtman Investigators program. This workshop will focus on the components that make an effective chalk talk and provide a safe place to practice new skills.

Topics include:

- » Connection to job talks
- » Relevance to faculty
- » What to draw on the white/blackboard
- » Levels of detail
- » Question anticipation
- » Tone and delivery

There are 15 spots available. If you would like to attend, please contact Dr. Yvette Pittman (yvette.pittman@nih.gov).

